

Clinical Trial Protocol

Iranian Registry of Clinical Trials

17 Sep 2026

Effect of intravenous magnesium sulfate on blood complement, quantitative CRP level and leukocytes count in patient with acute myocardial infarction who treated with streptokinase

Protocol summary

Summary

The goal of study is evaluation the effect of magnesium on the inflammatory reactant in acute myocardial infarction, 44 patients with acute ST elevation myocardial infarction who treated with streptokinase divided in 2 groups randomly, the serum sampel obtained of both groups initialy and 1gr magnesium injected in one group before streptokinase and then 8gr magnesium infused at 24 hours in this group (in compared to control group who didn't take magnesium) and at 6, 24, 48 hours after injection of streptokinase serum sampels took from both groups and the level of blood complement, CRP level and WBC count were compared between 2 groups. Diseases and conditions that affect complement, CRP level, WBC count and serum magnesium are the exclusion criteria.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201105096309N1**
Registration date: **2011-05-23, 1390/03/02**
Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2011-05-23, 1390/03/02

Registrant information

Name

Sanam Golshani

Name of organization / entity

Kermanshah University of Medical Science

Country

Iran (Islamic Republic of)

Phone

+98 83 1424 2133

Email address

dr-hashemkazerani@kums.ac.ir

Recruitment status

Recruitment complete

Funding source

Kermanshah University of Medical Science

Expected recruitment start date

2010-10-23, 1389/08/01

Expected recruitment end date

2010-11-21, 1389/08/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of intravenous magnesium sulfate on blood complement, quantitative CRP level and leukocytes count in patient with acute myocardial infarction who treated with streptokinase

Public title

Effect of magnesium on acute myocardial infarction

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: Patients with acute myocardial infarction who treated with streptokinase be enrolled in the study. Exclusion criteria are: cardiogenic shock, systolic blood pressure < 90, AV block grade 2 & 3, iliac resection, renal failure, collagen vascular diseases, alcohol & drug abuse, chemotherapy and consumption of immunosuppressive drugs during a past year.

Age

No age limit

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **44**

Randomization (investigator's opinion)

Randomized

Randomization description**Blinding (investigator's opinion)**

Single blinded

Blinding description**Placebo**

Not used

Assignment

Single

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Kermanshah University of Medical Science

Street address

Shahid Beheshti Bulvar,Kermanshah

City

kermanshah

Postal code**Approval date**

2010-09-23, 1389/07/01

Ethics committee reference number

7/420/6328

Health conditions studied**1****Description of health condition studied**

Acute myocardial infarction

ICD-10 code

I21

ICD-10 code description

Myocardial infarction specified as acute or with a stated duration of 4 weeks (28 days) or less from onset

Primary outcomes**1****Description**

CH50

Timepoint

6,24&48 after injection of streptokinase

Method of measurement

Neflometry

2**Description**

C3

Timepoint

6,24&48 hours ater injection of streptokinase

Method of measurement

Radial Immunodiffusion

3**Description**

C4

Timepoint

6,24&48hours ater injection of streptokinase

Method of measurement

Radial Immunodiffusion

4**Description**

CRP

Timepoint

6,24,48 heures after injection of streptokinase

Method of measurement

Elisa

5**Description**

Leukocytes count

Timepoint

6,24,48 heures after injection of streptokinase

Method of measurement

CBC H1 method

Secondary outcomes

empty

Intervention groups**1****Description**

1gr intravenous magnesium sulfate during 1 minute as a loading dose before streptokinase injection and 8gr magnesium sulfate infusion during 24 hours,we don't use of placebo

Category

Treatment - Drugs

Recruitment centers**1****Recruitment center**

Name of recruitment center

Kermanshah Emam Ali Hospital
Full name of responsible person
Drhashem kazerani
Street address
Emam Ali Hospital,Shahid Beheshti
Bulvard,Ker,amshah
City
Kermanshah

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Kermanshah University of Medical Sciences
Full name of responsible person
Dr Hashem Kazerani
Street address
Emam Ali Hospital,Shahid Beheshti
Bulvard,Kermanshahl
City
Kermanshah

Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

Kermanshah University of Medical Sciences

Proportion provided by this source

100

Public or private sector

empty

Domestic or foreign origin

empty

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

empty

Person responsible for general inquiries

Contact

Name of organization / entity
Kermanshah University Of Medical Science
Full name of responsible person
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Person responsible for updating data

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Web page address

Sharing plan

Deidentified Individual Participant Data Set (IPD)

empty

Study Protocol

empty

Statistical Analysis Plan

empty

Informed Consent Form

empty

Clinical Study Report
empty
Analytic Code

empty
Data Dictionary
empty